

## REMARKS

Claims 25-48 were examined in the Final Office Action mailed June 3, 2008, while claims 49-56 stand withdrawn pursuant to Election/Restriction Requirement. The Applicants note with appreciation the allowance of claim 47.

The Applicants also wish to thank the Examiner for the courtesies extended in the Examiner Interview conducted on October 7, 2008. The following remarks are consistent with the discussions in the Interview, including the determination that the combination of the Hundhausen and Gault references would not have been obvious.

The following rejections under 35 U.S.C. § 103(a) are currently pending:

- Claims 25, 27-29, 34, 36-44 and 48 as unpatentable over German Patent Publication No. DE 36 00 813 A1 ("Hundhausen") in view of U.S. Patent No. 6,303,891 to Gault ("Gault").
- Claims 26 and 45 as unpatentable over Hundhausen and Gault, further in view of U.S. Patent No. 5,124,527 to Takano ("Takano").
- Claim 30 as unpatentable over Hundhausen and Gault, further in view of U.S. Patent No. 5,558,791 to Fawer ("Fawer").
- Claims 31-33 as unpatentable over Hundhausen and Gault, further in view of U.S. Patent No. 4,463,243 to Church ("Church").
- Claim 35 as unpatentable over Hundhausen and Gault, further in view of U.S. Patent No. 4,645,903 to DeVito, et al. ("DeVito").
- Claim 46 as unpatentable over Hundhausen and Gault, further in view of U.S. Patent No. 3,778,891 to Bishel ("Bishel").

As discussed in the Interview, the present invention provides a method for welding of ductile cast iron to either steel or cast iron which permits previously unobtainable high weld production rates while maintaining very good material properties in the final welded structure – a method considered so significant that

one of the world's principle casting organizations, the American Foundry Society, presented the inventors with an award which characterized the invention as "having the greatest long range technical significance in the cast metals industry." Declaration of Jorna Tani, Letter Attachment dated November 21, 2006.

Rather than repeating the full text of the Applicants' February 25, 2008 arguments herein, the Applicants would respectfully refer the Examiner to the discussion at pages 8-14 of that response. The Applicants would, however, wish to reiterate the principle issues discussed in the Interview, including:

- (i) the Hundhausen reference's providing only a very generic listing of gases which could be used with its process, and its lack of discussion of *any* relevant gas concentration, let alone any providing any remarks or other suggestions that would direct one of ordinary skill in the art toward the present invention;
- (ii) the fact that the Gault reference is entirely directed to welding of steels, and thus contains no teachings which can be applied to the vastly different constitution of ductile cast iron (ductile cast iron being a material essentially saturated with carbon (at 3.5% carbon, at or near the carbon solubility limit, as compared to steels with ~0.15% carbon) and as a result having unique and highly problematic issues with carbon precipitation and redistribution in and near the weld zone in the face of welding heat); and
- (iii) the strong secondary considerations of non-obviousness provided both by the significant peer recognition of the great advance the present invention

provides in the field of ductile cast iron welding, and the absence of any such advance since the mid-1980's timeframe of the Hundhausen reference, despite the knowledge in the art of Hundhausen.

### CONCLUSION

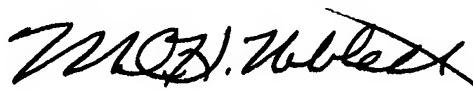
In view of the foregoing, the Applicants respectfully request reconsideration and withdrawal of the pending rejections based on the Hundhausen reference, and issuance of a Notice of Allowance for claims 25-48.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #038724.56337US).

Respectfully submitted,

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